

From: "Denise Kirchner" <kirchner@svminerals.com>
To: "Judith Unsicker" <junsicker@waterboards.ca.gov>
CC: "Arzell Hale" <Hale@svminerals.com>, "Ross May" <May@svminerals.com>
Date: 6/12/2009 11:22 AM
Subject: Section 303(d)/305(b) Assessment Comments
Attachments: SVM comments_2008_303(d) listing.pdf

Dear Ms. Unsicker:

I appreciate the opportunity to submit comments regarding the draft Section 305(b) and 303(d) Integrated Report for the Lahontan Region. On behalf of Searles Valley Minerals in Trona, California, I respectfully submit the attached two-page document with comments and questions.

Thank you for considering this submittal.

Sincerely,
Denise Kirchner

Denise Kirchner
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To: Judith Unsicker, CRWQCB Lahontan Region
From: Denise Kirchner, Searles Valley Minerals
Date: June 11, 2009

Re: Water Quality Data and Information for 2008 Integrated Report – List of Impaired Waters and Surface Water Quality Assessment [303(d)/305(b)]

Having reviewed the “Clean Water Act Section 305(b) and 303(d) Integrated Report for the Lahontan Region, April 2009”, Searles Valley Minerals submits the following comments and urges the following actions:

Searles Lake is listed in Appendix G as a Category 4B water body segment for the following pollutants:

Salinity/TDS/Chlorides – Source unknown. This listing is being addressed through Lahontan Water Board CAO 6-00-64 and 6-00-64A1 (also 6-00-64A2), and

Total Petroleum Hydrocarbons – Industrial Point Sources. This listing is being addressed through Lahontan Water Board CAO 6-00-64 and 6-00-64A1 (also 6-00-64A2).

Comments:

1. While the fact sheet retains the comment that “a determination of whether or not this water body is a ‘water of the United States’ will be made by the Regional Water Quality Control Board”, Searles Valley Minerals requests at a minimum and as a temporary alternative to de-listing, that the Category 4B listing for Searles Lake retain an asterisk noting the ambiguity, so the information is carried forward to the State Water Resources Control Board document.
2. A second amendment to the Cleanup and Abatement Order No. 6-00-64A2, dated October 11, 2001, is not referenced in the fact sheet at Appendix I. In Section 4 of 6-00-64A2, Regional Board directed staff to evaluate the appropriateness of current beneficial use designations for Searles Lake and to prepare information as part of a proposed Basin Plan amendment process to consider establishing site-specific beneficial uses for Searles Lake. The Regional Board staff has delayed complying with the directive, purportedly due to budgetary constraints for some eight and going on nine years. It is highly unlikely that budgetary relief will be occurring any time soon.

The CAO and subsequent amendments do not reference Salinity/TDS/Chlorides as “pollutants” in Searles Lake. In fact, at the direction of Regional Board staff, Searles Valley Minerals (then IMC Chemicals) conducted a study to evaluate the hydrologic resources within the Searles Valley Hydrologic Basin and the conclusion is that “a comparison of the ephemeral waters to the process brine effluent indicates that both are brines. The TDS concentrations for five ephemeral ponds were shown to be higher than the concentrations found in the process brine effluent.” (IMC Chemicals Inc. Evaluating Hydrologic Resources Within the Searles Valley Hydrologic Basin, March 2002, page 17, submitted to California Regional Water Quality Control Board Lahontan Region.) These constituents are naturally occurring, as rain and mountain stream runoff come in contact with the salt surface of Searles Dry Lakebed, that water instantly becomes brine with well over an average of 86,000 mg/L sodium, 350,000 mg/L TDS, and 145,000 mg/L Chlorides for the five ephemeral ponds tested. The presence of naturally occurring Salinity/TDS/Chlorides may require a change in

water quality standards because Searles Lake cannot be made drinkable or fishable. Note that brackish water on the surface at the south edge of Searles Lake resulting from a secondary industrial discharge (Westend North discharge) provides shorebird nesting; however, the minor discharge stream is not characteristic of the Searles Lake current and potential future mining resource brines.

3. USEPA expects TMDLs to be completed within 13 years after the list update cycle when the water body-pollutant combination was first listed. There is no doubt that the CAO addresses Total Petroleum Hydrocarbons at Searles Lake. Searles Valley Minerals has achieved compliance with Waste Discharge Requirements discharge limits and continues to work with Board staff to address historic cleanup sites as required in the CAO.
4. The fact sheet at Appendix G retains a reference to CDFG documentation of “hundreds of bird deaths, primarily from salt toxicosis and salt encrustation in the water body.” Searles Valley Minerals implemented its wildlife hazing and rehabilitation efforts, and DFG approved the Section 3005 Mitigation Plan of June 13, 2005. DFG agrees that SVM is doing all that it can to minimize bird loss due to contact with Searles Lake Brines, where do we go from here with regard to the 303(d) listing? In the absence of jeopardy from Total Petroleum Hydrocarbons and the protections being afforded migratory birds from naturally occurring Salinity/TDS/Chlorides what beneficial uses are being protected by the Regional Board?

I am not an expert in the world of TMDLs and water quality management, so I look to Regional Board staff to help me understand the process going forward. For almost a decade, a determination of the actual site-specific beneficial uses of Searles Dry Lakebed has not been addressed by the Regional Board. Searles Valley Minerals has no regulatory recourse in spite of submittal of overwhelming technical evidence. Further, over the past 10 years, Searles Valley Minerals has accumulated a great deal of analytical data for WDR reporting that was not available when the CAO was issued. Searles Valley Minerals previously submitted documents that I believe support removing Searles Lake from the 303(d) list of impaired water bodies. The process brines are not water as defined by scientific sources, are not waters of the state and are not waters of the United States. Searles Valley Minerals continues to respectfully petition and urge a formal amendment to the Basin Plan properly finding no beneficial uses other than brines for resource mining and a de-listing from the proposed 303(d) listing.

Denise Kirchner
Searles Valley Minerals
760.372.2118

RESPONSES TO COMMENTS FROM SEARLES VALLEY MINERALS

Denise Kirchner of Searles Valley Minerals submitted comments dated June 11, 2009 by email. Staff responses are shown in bold italic font following specific comments below. Several comments address proposed changes to the Water Quality Plan for the Lahontan Region (Basin Plan). While the staff report recognizes that many of the Lahontan Region's Section 303(d) listings may be addressed through revision of water quality standards rather than through Total Maximum Daily Loads (TMDLs), the appropriate forum for discussion of specific planning issues and priorities is the Triennial Review of the Basin Plan. A Water Board hearing for Triennial Review of the Basin Plan is tentatively scheduled for the October 2009 meeting.

Comments and Responses

General Comments:

Having reviewed the "Clean Water Act Section 305(b) and 303(d) Integrated Report for the Lahontan Region, April 2009", Searles Valley Minerals submits the following comments and urges the following actions:

Searles Lake is listed in Appendix G as a Category 4B water body segment for the following pollutants: Salinity/TDS/Chlorides – Source unknown. This listing is being addressed through Lahontan Water Board CAO 6-00-64 and 6-00-64A1 (also 6-00-64A2), and Total Petroleum Hydrocarbons – Industrial Point Sources. This listing is being addressed through Lahontan Water Board CAO 6-00-64 and 6-00-64A1 (also 6-00-64A2).

Specific Comments:

1. While the fact sheet retains the comment that "a determination of whether or not this water body is a 'water of the United States' will be made by the Regional Water Quality Control Board", Searles Valley Minerals requests at a minimum and as a temporary alternative to de-listing, that the Category 4B listing for Searles Lake retain an asterisk noting the ambiguity, so the information is carried forward to the State Water Resources Control Board document.

Response: As a state agency, the Lahontan Water Board does not have the authority to determine whether or not a water body is a water of the United States. Such determinations are made by the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency (USEPA) under the federal Clean Water Act. The statement referenced in the comment is being deleted from the water body fact sheets for the two Section 303(d) listings for Searles Lake.

2. A second amendment to the Cleanup and Abatement Order No. 6-00-64A2, dated October 11, 2001, is not referenced in the fact sheet at Appendix I. In Section 4 of 6-00-64A2, Regional Board directed staff to evaluate the appropriateness of current beneficial use designations for Searles Lake and to prepare information as part of a proposed Basin

Plan amendment process to consider establishing site-specific beneficial uses for Searles Lake. The Regional Board staff has delayed complying with the directive, purportedly due to budgetary constraints for some eight and going on nine years. It is highly unlikely that budgetary relief will be occurring any time soon.

Response: The amendment to the order will be cited in the final fact sheets for Searles Lake. Triennial Review is the appropriate forum for discussion of Basin Planning priorities.

3. The CAO and subsequent amendments do not reference Salinity/TDS/Chlorides as “pollutants” in Searles Lake. In fact, at the direction of Regional Board staff, Searles Valley Minerals (then IMC Chemicals) conducted a study to evaluate the hydrologic resources within the Searles Valley Hydrologic Basin and the conclusion is that “a comparison of the ephemeral waters to the process brine effluent indicates that both are brines. The TDS concentrations for five ephemeral ponds were shown to be higher than the concentrations found in the process brine effluent.” (IMC Chemicals Inc. Evaluating Hydrologic Resources Within the Searles Valley Hydrologic Basin, March 2002, page 17, submitted to California Regional Water Quality Control Board Lahontan Region.) These constituents are naturally occurring, as rain and mountain stream runoff come in contact with the salt surface of Searles Dry Lakebed, that water instantly becomes brine with well over an average of 86,000 mg/L sodium, 350,000 mg/L TDS, and 145,000 mg/L Chlorides for the five ephemeral ponds tested. The presence of naturally occurring Salinity/TDS/Chlorides may require a change in water quality standards because Searles Lake cannot be made drinkable or fishable. Note that brackish water on the surface at the south edge of Searles Lake resulting from a secondary industrial discharge (Westend North discharge) provides shorebird nesting; however, the minor discharge stream is not characteristic of the Searles Lake current and potential future mining resource brines.

Response: Pollutants are defined in the Clean Water Act to include: “dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water” (Section 502(6), 33 U.S.C. 1362). As interpreted by State Water Resources Control Board and USEPA staff for purposes of California’s water quality assessment process, the term “pollutant” includes all chemicals regardless of whether they come from natural or human sources. The State Water Board’s 2004 “Water Quality Control Policy for Developing California’s Clean Water Act Section 303(d) List” (Listing Policy) is silent on the issue of pollutants from natural sources. State Water Board assessment staff’s direction is that waters with standards violations due entirely to natural sources must be listed.

4. USEPA expects TMDLs to be completed within 13 years after the list update cycle when the water body-pollutant combination was first listed. There is no doubt that the CAO addresses Total Petroleum Hydrocarbons at Searles Lake. Searles Valley Minerals has achieved compliance with Waste Discharge Requirements discharge limits and continues to work with Board staff to address historic cleanup sites as required in the CAO.

Response: In approving the 2006 Section 303(d) list, the USEPA approved TMDL completion dates no later than 2019 for all water bodies identified as needing TMDLs. Placement of a water body-pollutant combination in Category 4b means that a TMDL is not necessary. The State Water Board put Searles Lake in the 2006 category of water bodies being addressed by actions other than TMDLs (now called Category 4b when all listings for a given water body are “being addressed”). For the current assessment process, Regional Water Boards have been directed to identify estimated standards attainment dates for Category 4b listings in lieu of TMDL completion dates. For consistency with the 2019 TMDL completion dates, attainment dates of 2019 are recommended for listings placed in the “being addressed” category in 2006. These dates should be regarded as estimates and are subject to change in future assessment cycles.

5. The fact sheet at Appendix G retains a reference to CDFG documentation of “hundreds of bird deaths, primarily from salt toxicosis and salt encrustation in the water body.” Searles Valley Minerals implemented its wildlife hazing and rehabilitation efforts, and DFG approved the Section 3005 Mitigation Plan of June 13, 2005. DFG agrees that SVM is doing all that it can to minimize bird loss due to contact with Searles Lake Brines, where do we go from here with regard to the 303(d) listing? In the absence of jeopardy from Total Petroleum Hydrocarbons and the protections being afforded migratory birds from naturally occurring Salinity/TDS/Chlorides what beneficial uses are being protected by the Regional Board? I am not an expert in the world of TMDLs and water quality management, so I look to Regional Board staff to help me understand the process going forward. For almost a decade, a determination of the actual site-specific beneficial uses of Searles Dry Lakebed has not been addressed by the Regional Board. Searles Valley Minerals has no regulatory recourse in spite of submittal of overwhelming technical evidence. Further, over the past 10 years, Searles Valley Minerals has accumulated a great deal of analytical data for WDR reporting that was not available when the CAO was issued. Searles Valley Minerals previously submitted documents that I believe support removing Searles Lake from the 303(d) list of impaired water bodies. The process brines are not water as defined by scientific sources, are not waters of the state and are not waters of the United States. Searles Valley Minerals continues to respectfully petition and urge a formal amendment to the Basin Plan properly finding no beneficial uses other than brines for resource mining and a de-listing from the proposed 303(d) listing.

Response: During the current assessment process, the highest priority was given to Regional Board SWAMP data, data submitted by stakeholders in response to a 2006-2007 solicitation process, and data that would justify changes in the 2006 listings for pathogens. Water Board assessment staff did not review any new data for Searles Lake. Delisting for Salinity/TDS/Chlorides is not feasible at this time because of the natural sources issue discussed above. Delisting for Total Petroleum Hydrocarbons (TPH) is not recommended while the provisions of the Cleanup and Abatement Order that deal with TPH are in effect. The appropriate forum for discussion of priorities for changes in designated beneficial uses is Triennial Review.